

Arizona Transportation Research Center

Newsletter — October 2003

Project Updates

Highlights from selected projects

STATE PLANNING AND RESEARCH (SPR) PROJECTS

SPR 486 – Highway Facilities for an Aging Arizona Population

The results of this study were used to submit an application for a federal demonstration grant related to highway safety and older drivers. The Federal Highway Administration agreed to fund a project at a segment of US Route 60 within the incorporated retirement community of Sun City. The density of older aged drivers makes this an excellent site for a demonstration. The total project budget is \$91,950. The demonstration project is expected to last at least 3 years. Design enhancement could include:

- Better street name signing
- Roadway alignment to provide a non-skewed intersection
- "Left Turn Yield on Green Ball" signing
- "Turning Traffic Must Yield to Pedestrians" signing
- "One Way/Wrong Way" signing
- Modification of crosswalk indication, and to 2.8 ft/sec
- Pedestrian crosswalk control placard

SPR-540 – EVALUATION OF MEASURES TO MINIMIZE WILDLIFE-VEHICLE COLLISIONS AND MAINTAIN WILDLIFE PERMEABILITY ACROSS HIGHWAYS (a.k.a. Elk Crossing Project)

The purpose of this research was to evaluate the effectiveness of highway design features in reducing animal-vehicle collisions and maintaining habitat connectivity. The study area was state route 260 between Payson and Show Low, Arizona. The study was conducted under a Joint Project Agreement with the Arizona Game and Fish Department. The technical advisory committee drew panel members from ADOT, AZG&F, Arizona Department Administration, the Federal Highway Administration, and the U.S. Forest Service. This project will be reviewed by FHWA for possible designation as an exemplary

ecosystem initiative project. A second phase of research focusing on the Christopher Creek Section of SR260 has been approved by the ADOT research Steering Committee.

Some of the techniques used to monitor animal behavior and movement include television cameras, prepared track beds and global position satellite (GPS) collars. To date, cameras have recorded 1,730 animals, including 1,435 elk and 257 deer. Higher passage rates for elk were recorded at the east underpass (73.9 percent) than the west underpass (50.7 percent). A total of 5,505 sets of wildlife tracks, including 4,026 elk and 919 deer, have been recorded on prepared track beds read 62 different times since April 2002.



West Underpass – 315 ft. deep



East Underpass - 165 ft. deep

ATRC UPDATE

ATRC is soliciting suggestions for its fiscal year 2005 research program. Workshops and meetings will be held with ADOT groups to help identify needs and potential research topics. However, suggestions are not limited to ADOT employees nor are projects restricted to ADOT facilities. All transportation-related research topics will be considered for the program Research suggestions may be submitted through ATRC's web site at:

www.dot.state.az.us/ABOUT/atrc/Index.htm

Select *Research Program* and then *Suggestion for Research Program form*.

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